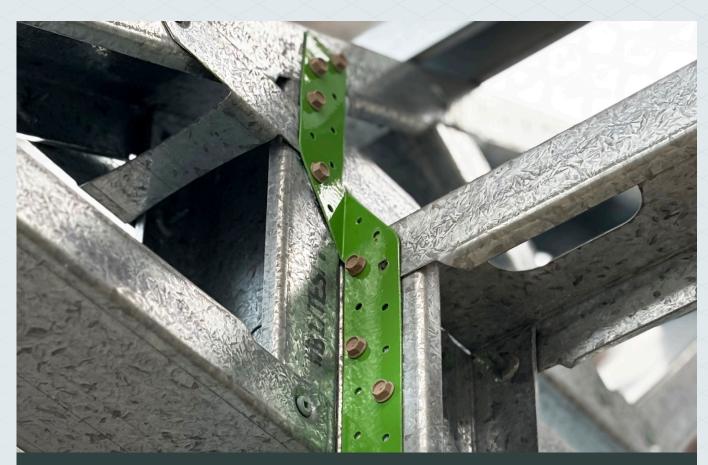




FRAMECAD Building Components

Connectors for Steel Framed Construction



For more information, details or a quote, please contact us at: framecad.com/contact-us



FRAMECAD Connectors: Engineered for Excellence

FRAMECAD Connectors are meticulously designed to ensure speed, suitability, and superior performance. Each connector plays a crucial role in delivering the most advanced and comprehensive end-to-end steel frame building solutions globally.

Our portfolio includes a wide range of connectors for steel truss, wall, and joist assemblies essential for construction. FRAMECAD connectors are crafted with four primary objectives in mind:

DESIGN: Ease of design with correct information specified in

FRAMECAD Software to deliver robust and reliable

structures.

SPEED: All connectors have been selected to optimise the speed

and efficiency of the FRAMECAD building system. Using FRAMECAD screws reduces labour costs by making it quicker and easier to fix screws consistently, helping business reach optimum production rates, both in the

factory and on-site.

SUITABILITY: As the world leader in Cold Formed Steel construction

technology FRAMECAD has developed FRAMECAD Connectors to further improve and advance this

construction system.

The protective green powder coating makes identification of FRAMECAD connectors easy during construction to

ensure correct location and installation.

The specified FRAMECAD Fasteners form a critical part of the connector's tested performance and substitution with noncompliant screws or components may compromise the

integrity of the structure.

PERFORMANCE: The design capacity of the connector range has been

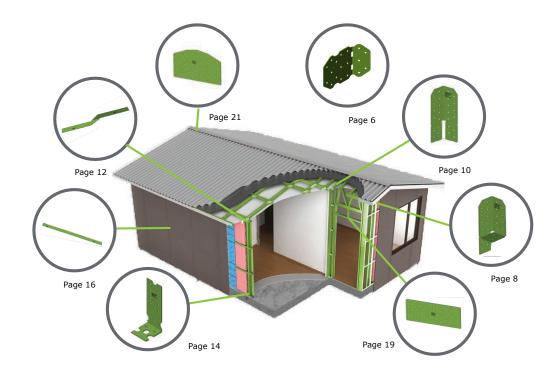
calculated in accordance with AS/NZ 4600:2018 and AISI S100:2020. FRAMECAD Fasteners have been tested

according to the AS/NZS 4600:2018 and AISI S100:2020 to ensure they perform effectively with the FRAMECAD Building System as well as complying to all relevant

manufacturing standards.



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Compliance

FRAMECAD Connectors: Quality and Compliance



FRAMECAD Connectors are manufactured from high-quality steel that complies with AS/NZ 1397 G350 and ASTM A653M HSLAS Type A Grade 340 standards. Each connector features a galvanized Z275 coating and is further protected with FRAMECAD's long-life green protection coating to enhance corrosion resistance.

The design capacity of our connectors is calculated in accordance with AS/NZ 4600:2018 and AISI S100:2020 standards. FRAMECAD fasteners undergo rigorous testing to meet these standards and are produced in ISO 9001 certified facilities, ensuring consistent quality and reliability.

All constructions using FRAMECAD products must adhere to local, national, or international building regulations. FRAMECAD products are FRAMECAD Certified, and the ratings published in this guide are valid when the products are designed, installed, and used according to this guide and approved by a locally registered engineer.

Substitution



The performance of FRAMECAD connection solutions is sensitive to design detailing, products used and construction practices. All FRAMECAD connection solutions have been developed specifically for use with the FRAMECAD cold formed steel framing system and tested and assessed to ensure the required level of performance.

It is important to use only FRAMECAD branded components where specified and closely follow the design details and construction practices, so you can be confident that the required level of structural performance is achieved on site.



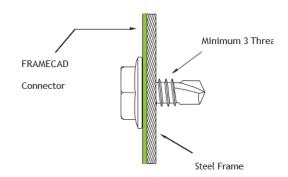
Installation

FRAMECAD Erection Fasteners

FRAMECAD Erection Fasteners have a Drill Point capable of drilling into medium to heavy gauge steel.

For successful connection, the screw must be of sufficient length to ensure at least three (3) threads are protruding through the fastened material.

The drill point length must exceed the combined thickness of both the fixture and the substrate, including any spaces or gaps, to ensure proper fastening



Where to Screw, Fasteners Spacing, End and Edge Distance Requirement

Min edge distance (a2) = 1.5df (approximately 8mm for 10g screws) Min Spacing (b1 or b2)= 3.0df (approximately 15mm for 10g screws) Where df = Nominal screw diameter (mm)

Notes:

- The end distance is the distance to the edge of the steel measured in the rection of the applied force.
- To avoid tearing, the minimal end distance, a1, for our connector range is 8mm, unless otherwise specified.
- Use only the specified FRAMECAD connectors and specified FRAMECAD fastener type and quantity.
- Do not over load the joints or connectors.
- Do not weld connectors or drill additional fastener holes.
- Do not overtighten screws. Screws must be of sufficient length to ensure at least 3 threads protrude through the fastened material.

Any gaps in joints between steel members must not exceed 1.5mm.

FRAMECAD Cold Formed Steel Specification

The design yield strength (Fy) and tensile strength (Fu) for cold-formed steel frame materials are specified in the table below.

| Fy (MPa) | | | | | | | | Fu (MPa) | | | | | |
|----------|-----------------------------------|------|------|------|------|------|------|-----------------------------------|------|------|------|--|--|
| | Frame Material Thickness BMT (mm) | | | | | | | Frame material thickness BMT (mm) | | | | | |
| AS 1397 | ASTM A653 | 0.55 | 0.75 | 0.95 | 1.15 | 1.55 | 0.55 | 0.75 | 0.95 | 1.15 | 1.55 | | |
| G350 | 50 | N/A | 350 | 350 | 350 | 350 | N/A | 420 | 420 | 420 | 420 | | |
| G500 | 70 | N/A | 500 | 500 | 500 | N/A | N/A | 520 | 520 | 520 | N/A | | |
| G550 | 80 | 410 | 495 | 550 | N/A | N/A | 410 | 495 | 550 | N/A | N/A | | |



Truss Bracket TBR-A2 / TBL-A2

Application:

The Truss Bracket suits a wide range of Truss Frame connections.

The unique geometry forms a truss tie-down that allows for direct fixing to walls studs, as required for resisting high uplift forces. Alternatively, the bracket may be used to tie trusses directly to the wall top plate when a thermal block or doubler plate is present.

Truss Brackets also provide a specialist plate to strengthen connections in roof and floor truss fabrication, and form part of the FRAMECAD certified system.

Truss Brackets are supplied with 90-degree prebend in Left and Right formations. The short tab is to be bent horizontal on site to suit the application.

Patent Protected.



* BMT = Base Material Thickness

Installation:

Truss Frame Connection Plate Application: Refer to FRAMECAD framing system manuals for details.

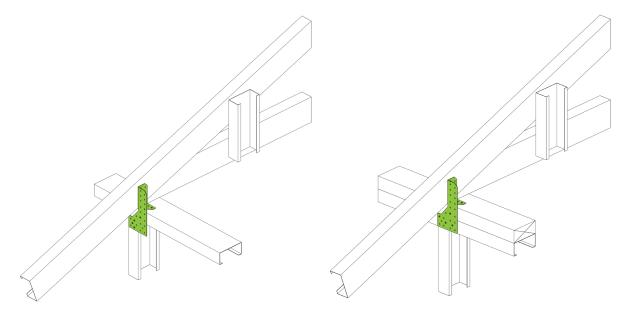
Truss Tie-Down Application: Bend short tab inwards to the horizontal, and fix with 10g screws as specified in the tie-down design capacity tables, or to Engineer's specification.

For fixing use FRAMECAD 10g HWH FrameFix screws, or for applications that require a flush finish, use FRAMECAD Flathead screws.



| Product | Item Code | Size | Description | Carton Qty | | | |
|--|--------------|------------|---|---------------|--|--|--|
| HWH FrameFix DP Ideal for panel to panel fixing during frame erection and for attachi connectors to framing members | | | | | | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | | | |
| FRAMECAD Flathead Ideal for connecting metal strapping or bracing and adding additistrength to connectors. | | | | | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 | | | |

Truss Bracket Tie-Down Connector Design Capacities



Truss connection to single top plate

Truss connection to two top plates

| Design Capacity - LRFD Force (kN) | | | | | AS/NZS 4600 / AISI S100 | | | | | | | | |
|-----------------------------------|--------------------------|-----------------------------|----------------------------------|-----------|-------------------------------|------|-----|------|-----|------|-----|-----------------|--|
| | | | | Number of | Steel Thickness Framing (BMT) | | | | | | | | |
| Item Code | Bracket Gauge (mm) | Steel Grade (Framing) | screws required for Uplift | 0.75 | imm | 0.95 | imm | 1.15 | imm | 1.55 | imm | Total Screws | |
| | () | (114111119) | Restraint | F1 | F2 | F1 | F2 | F1 | F2 | F1 | F2 | | |
| | | | 2 - 10g | 2.5 | 2.5 | 3.6 | 3.6 | 4.8 | 4.8 | 6.1 | 5.1 | 7 | |
| | | G350 G500 | 3 - 10g | 3.8 | 2.5 | 5.4 | 3.6 | 7.1 | 4.8 | 9.1 | 5.1 | 9 | |
| | | | 4 - 10g | 5.1 | 2.5 | 7.2 | 3.6 | 9.1 | 4.8 | 9.1 | 5.1 | 11 | |
| | | | 2 - 10g | 3.1 | 3.1 | 4.4 | 4.4 | 5.9 | 5.1 | N/A | N/A | 7 | |
| | 1.15 | | 3 - 10g | 4.7 | 3.1 | 6.6 | 4.4 | 8.9 | 5.1 | N/A | N/A | 9 | |
| | | | 4 - 10g | 6.3 | 3.1 | 8.8 | 4.4 | 9.1 | 5.1 | N/A | N/A | 11 | |
| | | | 2 - 10g | 3.0 | 3.0 | 4.4 | 4.4 | N/A | N/A | N/A | N/A | 7 | |
| | | G550 | 3 - 10g | 4.5 | 3.0 | 6.6 | 4.4 | N/A | N/A | N/A | N/A | 9 | |
| | | | 4 - 10g | 6.0 | 3.0 | 8.8 | 4.4 | N/A | N/A | N/A | N/A | 11 | |



- 1. In addition to providing uplift screws to both truss and wall frame, provide 2 screws to horizontal leg and 1 additional screw to upper half of the vertical leg.
- 2. Not all fastener holes need to be filled, multiple fastener holes are provided to give options for screw location.
- 3. LRFD Force is the LRFD Design capacity according to AISI S100 and equal to the Ultimate Limit State (ULS) design capacity according to AS/NZS 4600.
- 4. The nominal shear strength of the screw connections are limited by tearing when critical, with a minimum edge distance of 8mm.

Ordering and Packaging

| Item Code | Description | Qty |
|---------------------------------------|--|-----|
| 116976V02 (Right) 116976V03 (Left) | TBR-A2 / TBL-A2 Truss Bracket Connector 1.15mm | 50 |



Multi Plate Connector MP-A1

Application:

The Multi Plate connector bracket suits a wide range of frame-to-frame connections. Use it for the erection of hip and valley roof trusses. Supplied with 45-degree prebend, adjustable from 0 to 135 degrees (bend once only).

Patent Protected.



* BMT = Base Material Thickness

Installation:

Use FRAMECAD HWH FrameFix screws, or for applications that require a flush finish, use FRAMECAD Flathead screws.

For screw numbers please refer to engineers' specifications.

| Product | Item Code | Size | Description | Carton Qty | | | | | |
|-------------------|--------------|---|--|---------------|--|--|--|--|--|
| HWH FrameFix DP | | nel to panel fix to framing men | ing during frame erection and for attac nbers | ching | | | | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | | | | | |
| | 002409 | 12g x 25mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | | | | | |
| FRAMECAD Flathead | | Ideal for connecting metal strapping or bracing and adding additional strength to connectors. | | | | | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 | | | | | |



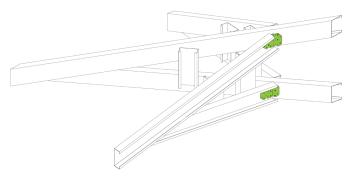
Multi Plate Connector Design Capacity

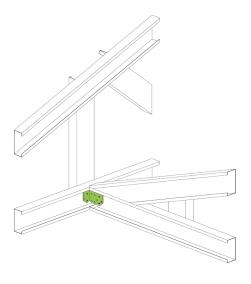
| | Shear Force (kN): AS/NZS 4600 /AISI S100 |
|---------------------------------------|--|
| · · · · · · · · · · · · · · · · · · · | Shear Force (kN): AS/NZS 4600 /AISI S100 |

| | Fixing Method | | Framing Material | | | | | | | |
|------------------|---|---------------------|------------------|-----------------|---------------|---------------|--|--|--|--|
| 10gx19 i | mm HWH Frar | neFix DP | | AS - 1397: 2021 | | | | | | |
| | | | | Steel Thickness | | | | | | |
| Screw Pattern | Screw Location | Total No. Screws | Steel Grade | 0.75mm BMT | 0.95mm BMT | 1.15mm BMT | | | | |
| | 0000 | | G500 | 4.9 | 6.8 | 7.5 | | | | |
| JFA | | 10 | G550 | 4.6 | 6.8 | - | | | | |
| | | | G350 | 3.9 | 5.6 | 7.3 | | | | |
| | 0000 | | G500 | 3.8 | 5.4 | 6.8 | | | | |
| | | 6 | G550 | 3.6 | 5.4 | - | | | | |
| | | | G350 | 3.1 | 4.4 | 5.8 | | | | |
| | | | G500 | 3.2 | 4.5 | 5.7 | | | | |
| JFC | | 8 | G550 | 3.0 | 4.5 | - | | | | |
| | | | G350 | 2.6 | 3.7 | 4.8 | | | | |
| | (O) | | G500 | 2.7 | 3.7 | 4.8 | | | | |
| | © · · o | 8 | G550 | 2.5 | 3.7 | - | | | | |
| | | | G350 | 2.1 | 3.1 | 4.0 | | | | |
| | 600 | | G500 | 2.0 | 2.9 | 3.6 | | | | |
| JFE | 6 6 | 8 | G550 | 1.9 | 2.9 | - | | | | |
| | | | G350 | 1.6 | 2.3 | 3.1 | | | | |
| | | | G500 | 1.0 | 1.4 | 1.8 | | | | |
| | | 6 | G550 | 0.9 | 1.4 | - | | | | |
| | | | G350 | 0.8 | 1.2 | 1.5 | | | | |

Ordering and Packaging

| Item Code | Description | Qty |
|--------------|-------------------------------------|-----|
| 116975 | MP-A1 - Multi Plate Connector 1.5mm | 50 |







Tri Fix Tie-down TF/R-A2 | TF/L-A2

Application:

Used to tie-down roof trusses, joists or rafters to the wall frame. Can also be used in cyclonic environments when fixed on both sides of the wall plate, with appropriate plate to stud fixing.



* BMT = Base Material Thickness

Installation:

Use FRAMECAD Certified Hex Head screws or, for applications that require a flush finish, use FRAMECAD Flathead screws. For quantity of screws refer to the Design Capacities Tables.

| Product | Item Code | Size | Description | Carton Qty | | |
|---|--------------|------------|--|---------------|--|--|
| HWH FrameFix DP | Ideal for pa | • | ing during frame erection and for fixing | 9 | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | | |
| FRAMECAD Flathead Ideal for connecting metal strapping or bracing and adding a strength to connectors. | | | | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 | | |



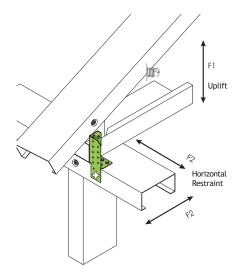
Tri Fix Design Capacities

| Design Capacity - LRFD Force (kN) | | | | | AS/NZS 4600 / AISI S100 | | | | | | | | | | | | |
|-----------------------------------|------------------|-----------------------------|-----------|-------|-------------------------|------------|----------|-------------|---------|--------|------|--------|------|--------|--|--------|--|
| | | _ | Number of | | | Stee | l Thickr | ness Fra | ming (I | вмт) | | | | | | | |
| Item Code | Bracket Gauge | Steel Grade (Framing) | Grade | Grade | Grade | Grade | Grade | required 0. | | 0.75mm | | 0.95mm | | 1.15mm | | 1.55mm | |
| | (| | | | | Restraint) | F1 | F2 | F1 | F2 | F1 | F2 | F1 | F2 | | | |
| | | CSEO | CSEO | G350 | 2 - 10g | 2.5 | 2.5 | 3.6 | 3.6 | 4.8 | 4.8 | 6.1 | 5.1* | 6 | | | |
| | G350 | G350 | 3 - 10g | 3.8 | 2.5 | 5.4 | 3.6 | 7.1 | 4.8 | 9.1 | 5.1* | 8 | | | | | |
| | 1.15mm | | 2 - 10g | 3.1 | 3.1 | 4.4 | 4.4 | 5.9 | 5.1* | N/A | N/A | 6 | | | | | |
| | 1.15//// | G500 | 3 - 10g | 4.7 | 3.1 | 6.6 | 4.4 | 8.9 | 5.1* | N/A | N/A | 8 | | | | | |
| | | 0550 | 2 - 10g | 3.0 | 3.0 | 4.4 | 4.4 | N/A | N/A | N/A | N/A | 6 | | | | | |
| | | G550 | 3 - 10g | 4.5 | 3.0 | 6.6 | 4.4 | N/A | N/A | N/A | N/A | 8 | | | | | |

- 1. Not all fastener holes need to be filled, additional fastener holes are provided to give options for screw location.
- 2. LRFD Force is the LRFD Design capacity according to AISI S100 and equal to the Ultimate Limit State (ULS) design capacity according to AS/NZS 4600.
- 3. The nominal shear strength of the connection is limited by tearing when critical, with a minimum edge distance of 8mm.
- 4. A minimum of 2 screws must be used for horizontal restraint.
- 5. *Connection capacity is limited by the steel strength of the Bracket.

Ordering and Packaging

| Item Code | Description | Qty |
|--------------|----------------------------------|-----|
| 009806 | TF/R-A2 - Tri Fix Right - 1.15mm | 25 |
| 009808 | TF/L-A2 - Tri Fix Left - 1.15mm | 25 |

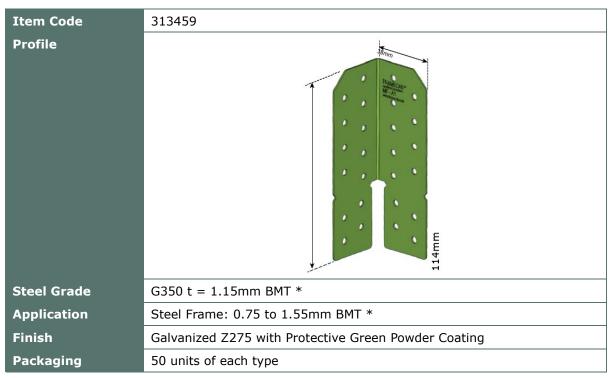




Multi Fix Connector MF-A2

Application:

The Multi Fix connector can be used at a 90-degree angle, or with either leg bent as a Tri Fix connector, allowing maximum flexibility in multiple applications. Use the Multi Fix Connector to tie down roof trusses and rafters and to connect trusses.



* BMT = Base Material Thickness

Installation:

The bending slot allows for easy and accurate on-site bending. The Multi Fix can be bent into position only once along the bending slot.

Use FRAMECAD Certified HWH FrameFix drill point screws, or for applications requiring a flush finish, use FRAMECAD Flathead screws.

| Product | Item Code | Size Description | | Carton Qty |
|-------------------|---|------------------|---|---------------|
| HWH FrameFix DP | Ideal for panel to panel fixing during frame erection and for fixing connectors. | | | |
| | 307387 | 10g x 19mm | 19mm Hex Head FrameFix DP, 1000hrs, Loose | |
| FRAMECAD Flathead | Ideal for connecting metal strapping or bracing and adding additional strength to connectors. | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 |



Multi Fix Design Capacities

| Installation Type A | | | | Design Capacity - LRFD Force (kN) | | | | AS/NZS 4600 / AISI S100 | | | | |
|---------------------|------------------|-----------------------------|-----------------------|-----------------------------------|---------|----------|----------|----------------------------|---------|------|--------|-----------------|
| | | | Number of | | | Stee | l Thickr | ness Fra | ming (I | вмт) | | |
| Item Code | Bracket Gauge | Steel Grade (Framing) | screws required | 0.75 | mm | 0.95 | mm | 1.15 | mm | 1.55 | īmm | Total Screws |
| | | (Fraining) | (Uplift Restraint) | F1 | F2 | F1 | F2 | F1 | F2 | F1 | F2 | |
| | | 6350 | 2 - 10g | 2.5 | 2.5 | 3.6 | 3.6 | 4.8 | 4.8 | 6.1 | 5.1* | 6 |
| | | G350 | 3 – 10g | 3.8 | 2.5 | 5.4 | 3.6 | 7.1 | 4.8 | 9.1 | 5.1* | 8 |
| | 4.45 | GEOO | 2 – 10g | 3.1 | 3.1 | 4.4 | 4.4 | 5.9 | 5.1* | N/A | N/A | 6 |
| | 1.15mm | G500 | 3 – 10g | 4.7 | 3.1 | 6.6 | 4.4 | 8.9 | 5.1* | N/A | N/A | 8 |
| | | CEEO | 2 - 10g | 3.0 | 3.0 | 4.4 | 4.4 | N/A | N/A | N/A | N/A | 6 |
| | | G550 | 3 - 10g | 4.5 | 3.0 | 6.6 | 4.4 | N/A | N/A | N/A | N/A | 8 |
| Installa | tion Type | В | | De | sign Ca | pacity - | LRFD F | orce (k | N) | | NZS 46 | |
| | | | Number of | | | Stee | l Thickr | ness Fra | ming (I | вмт) | | |
| Item Code | Bracket Gauge | Steel Grade (Framing) | screws required | 0.75 | mm | 0.95 | mm | 1.15 | mm | 1.55 | īmm | Total Screws |
| | | (i railing) | (Uplift Restraint) | F1 | F2 | F1 | F2 | F1 | F2 | F1 | F2 | |
| | | G350 | 3 - 10g | 3.1 | N/A | 4.4 | N/A | 5.8 | N/A | 7.3 | N/A | 6 |

1. Not all fastener holes need to be filled, additional fastener holes are provided to give options for screw location.

5.4

5.4

N/A

N/A

6.8

N/A

N/A

N/A

N/A

N/A

N/A

N/A

6

6

2. LRFD Force is the LRFD design capacity to AISI S100 and the Ultimate Limit State (ULS) design capacity to AS/NZS 4600.

N/A

N/A

- 3. The nominal shear strength of the connection is limited by tearing when critical, with a minimum edge distance of 8mm.
- 4. A minimum of 2 screws must be used for the F2 horizontal restraint.

3 - 10g

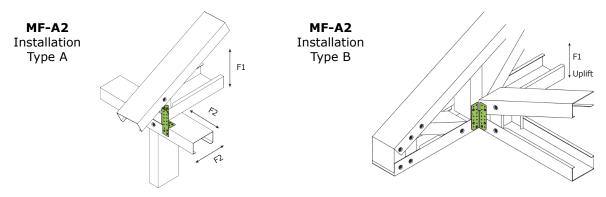
3 - 10g

5. The Multi Fix may only be bent into position once along the bending slots.

3.8

3.6

6. *Connection capacity is limited by the steel strength of the Bracket.



Ordering and Packaging

1.15mm

G500

G550

| Item Code | Description | Qty |
|-----------|------------------------------------|-----|
| 313459 | MF-A2 - Multi Fix Connector 1.15mm | 50 |



Twist Fix Strap TFS/R-A2 | TFS/L-A2

Application:

Used as a heavy-duty tie-down for roof trusses, joists, or rafters in high wind zones or where highstrength connections are required. The connector's geometry accommodates a high number of fasteners and enables the tie to be fixed directly along the length of the stud.



* BMT = Base Material Thickness

Installation:

The Twist Fix Strap can be bent over the truss during installation. It must form a direct connection between the truss, joist, or rafter and the wall stud.

Use the specified number of FRAMECAD 10g Hex Head screws, or for applications requiring a flush finish, use FRAMECAD 10g Flathead screws. Refer to the Design Capacities Table for the required quantity of screws at each end of the Twist Fix Strap.

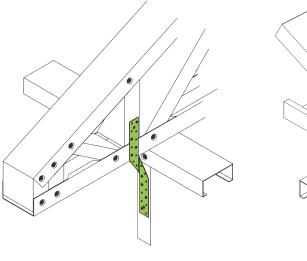
| Product | Item Code | Size Description | | Carton Qty | |
|------------------------|---|--|---|---------------|--|
| HWH FrameFix DP | • | Ideal for panel to panel fixing during frame erection and for fixing connectors. | | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | |
| literate - | 002409 | 12g x 25mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | |
| FRAMECAD Flathead | Ideal for connecting metal strapping or bracing and adding additional strength to connectors. | | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 | |

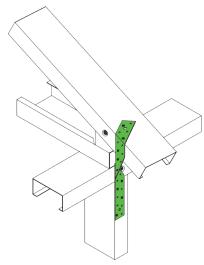


Twist Fix Strap Design Capacities

| Design Capacity - LRFD Force (kN) | | | | | AS/NZS 4 | 1600 / AISI S1 | 00 | | |
|-----------------------------------|--------------|--------------------|---------------------------|--------|-------------------------------|----------------|--------|-----------------|--|
| Item | Item Bracket | | Number of screws required | | Steel Thickness Framing (BMT) | | | | |
| Code | Gauge | Grade (Framing) | (Uplift Restraint) | 0.75mm | 0.95mm | 1.15mm | 1.55mm | Total Screws | |
| | | G350 | 4 - 10g | 5.0 | 7.2 | 8.8 | 8.8 | 8 | |
| | | | 6 - 10g | 7.5 | 8.8 | 8.8 | 8.8 | 12 | |
| | 1 1 Emm | G500 | 4 - 10g | 6.2 | 8.8 | 8.8 | N/A | 8 | |
| | 1.15mm | G550 | 6 - 10g | 8.8 | 8.8 | 8.8 | N/A | 12 | |
| | | | 4 - 10g | 6.0 | 8.8 | N/A | N/A | 8 | |
| | | G350 | 6 - 10g | 8.8 | 8.8 | N/A | N/A | 12 | |

- 1. Not all fastener holes need to be filled, additional fastener holes are provided to give options for screw location. Install fasteners symmetrically.
- 2. Install half of the total fasteners on each end of the strap to achieve full listed load capacity
- 3. LRFD Force is the LRFD Design capacity according to AISI S100 and equal to the Ultimate Limit State (ULS) design capacity according to AS/NZS 4600.
- 4. The nominal shear strength of the connection is limited by tearing when critical, with a minimum edge distance of 8mm.





The Twist Fix Strap can be bent over the truss to allow for additional screw placement.

Ordering and Packaging

| Item Code | Description | Qty |
|--------------|---|-----|
| 009810 | TFS/R-A2 - Twist Fix Strap (Right) 1.15mm | 50 |
| 009812 | TFS/L-A2 - Twist Fix Strap (Left) 1.15mm | 50 |



Holdown Fix & Washer HDF-A1

Application:

The Holdown Fix & Washer anchoring system is designed to secure steel frame structures to concrete, steel, or timber foundations and floors.

The special geometry of the bracket and washer allows for close placement to one side of the stud, increasing the concrete slab edge distance and maximizing the capacity of the anchor system.

FRAMECAD's Holdown Fix & Washer, combined with the FRAMECAD Screw Bolt, provides a highstrength anchoring solution to resist uplift forces typical in light-framed single and two-story dwellings.



* BMT = Base Material Thickness

Installation:

The Holdown Fix & Washer anchoring system must be installed using the included washer, the specified number of FRAMECAD 12g HWH FrameFix screws, and an anchor bolt or screws with a design tension strength that meets the required design capacities.

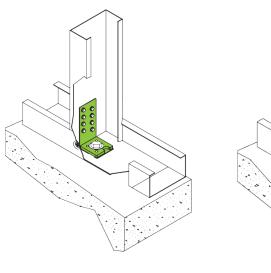
| Product | Item Code | Description | | Carton Qty | | |
|------------------------|---------------|---|--------------------------------------|---------------|--|--|
| HWH FrameFix DP | Ideal for pan | Ideal for panel to panel fixing during frame erection and for fixing connectors | | | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | | |
| | 002409 | 12g x 25mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 | | |

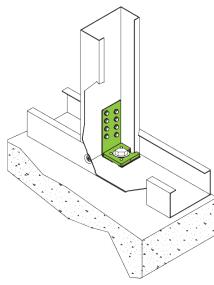


Holdown Fix & Washer Design Capacities

| Design Ca | apacity - LRFD | Force (kN) | AS/NZS 4600 / AISI S100 | | | |
|-----------|----------------|----------------|-------------------------|--------|---------|--|
| Thom Code | Steel Grade | Number & | Steel T | (BMT) | | |
| Item Code | (Framing) | Size of screws | 0.55mm | 0.75mm | ≥0.95mm | |
| | C3E0 | 6 - 12g | - | 8.1 | 12* | |
| | G350 | 8 - 12g | - | 10.7 | 12* | |
| | G500 | 6 - 12g | - | 10.0 | 12* | |
| | | 8 - 12g | - | 12* | 12* | |
| | OFF0 | 6 - 12g | 4.9 | 9.6 | 12* | |
| | G550 | | 6.6 | 12* | 12* | |

- 1. LRFD Force is the LRFD Design capacity according to AISI S100 and equal to the Ultimate Limit State (ULS) design capacity according to AS/NZS 4600.
- 2. Use the specified number of FRAMECAD certified Hex Head 12g screws.
- 3. Fix to Base with Anchors with a Design Tension Strength that meets the Design Capacity.
- 4. *Capacity limited by the design strength of the Holdown Bracket determined by testing.





The design of the Bracket and Washer allows fixing close to one side of the framing to increase slab edge distance and maximise capacity of the anchor system.

Ordering and Packaging

| Item Code | Description | Qty |
|--------------|--|-----|
| 009815 | HDF-A1 Holdown Anchor 1.15mm & 6mm Flat Washer | 25 |



Strap Fix Bracing SF/32-A2

Application:

Used to brace roof, wall, and ceiling panels, Strap Fix is available in long coils with multiple holes, making it easy to use on site. It can also serve as a tie-down for wall frames or trusses.



* BMT = Base Material Thickness

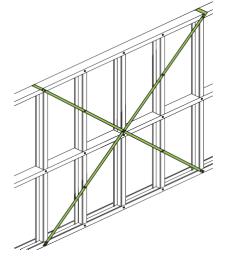
Installation:

To function as a structural bracing system, the bracing straps must be tensioned using the FRAMECAD Strap Fix Tensioner PT32.

After tensioning, the straps must be screwed to each stud they cross.

Ensure that each length of the strap has a properly tightened tensioner before securing it to the stud.

Refer to the Strap Fix Bracing Design Capacities table on the following page for the required quantity of screws.



| | Product | Item Code | Size | Description | Carton Qty |
|-----|-----------------|---|------------|--|---------------|
| HW | H FrameFix DP | Ideal for panel to panel fixing during frame erection and for fixing connectors. | | | |
| | | 307387 | 10g x 19mm | mm Hex Head FrameFix DP, 1000hrs, Loose | |
| FRA | AMECAD Flathead | Ideal for connecting metal strapping or bracing and adding additional strength to connectors. | | | |
| (| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 |



Strap Fix Bracing Design Capacities

| Design Ca | apacity - LRFD | Force (kN) | | AS/NZS 4600 |) / AISI S100 | | |
|-----------|----------------|---|-----------------------------------|-------------|---------------|-------|--|
| | | Number of screws each end – Screw Gauge | | | | | |
| Item Code | Frame Steel | | Frame Material Thickness BMT (mm) | | | | |
| Item Code | Grade | 0.75mm | 0.95mm | 1.15mm | 1.55mm | Loads | |
| | G350 | 7 – 10g | 5 - 10g | 4 - 10g | 4 - 10g | | |
| | G500 | 6 - 10g | 5 - 10g | 4 - 10g | N/A | 8.8 | |
| | G550 | 6 - 10g | 5 - 10g | N/A | N/A | | |

- 1. Not all fastener holes need to be filled, additional fastener holes are provided. Install fastener symmetrically.
- 2. LRFD Strength is the LRFD Design capacity according to AISI S100 and is the Ultimate Limit State (ULS) design capacity according to AS/NZS 4600.
- 3. Nominal shear strength of the connection is limited by tearing when critical with an 8mm minimum edge distance.
- 4. The tables values are the quantity of fastener at each end of the Strap Fix Brace.

Ordering and Packaging:

| Item Code | Description | Qty |
|--------------|--|-----------------|
| 009814 | SF/32-A2 Strap Fix 1.15mm 32mm x 50 meters | 1 x 50 mtr Coil |



Strap Fix Tensioner PT-32

Application:

Used in conjunction with FRAMECAD Strap Fix to brace roofs, walls and ceiling panels. The Strap Tensioner is easily installed on strap bracing to apply load to bracing systems to effectively resist deflection.

Designed for steel frames up to 1.55mm (BMT).

Features & Benefits:

- Galvanized Z275
- Manufactured to Steel grade AS/NZ 1397 G450 Hi Tensile Steel
- Max Extension attributable to the unit 4.0mm
- Compliant with: AS 4440 clause 4.3.2 steel brace



Installation:

The Strap Fix Tensioner can easily and quickly tension the Strap Fix simply by driving the Hex head screw. FRAMECAD Strap Fix takes the load in tension only and should be used in pairs; one Strap fix Tensioner on each Strap Fix.

Ordering and Packaging:

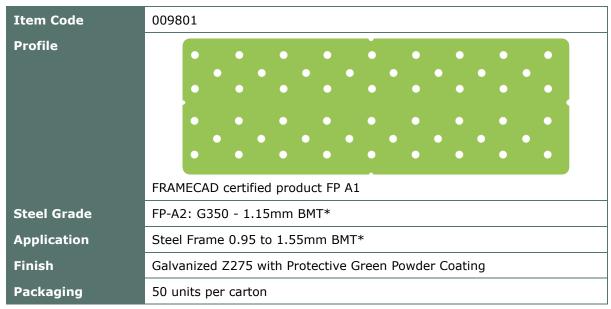
| Item Code | Description | Qty |
|--------------|--|-----|
| 308321 | PT-32 Strap brace tensioner Hi tensile Steel | 100 |



Fix Plate Connector FP-A2

Application:

Used to locally reinforce connection strength and connect cold formed steel panels.



* BMT = Base Material Thickness

Installation:

Use FRAMECAD FrameFix Hex Head, or for applications that require a flush finish, use FRAMECAD Flathead Screws.

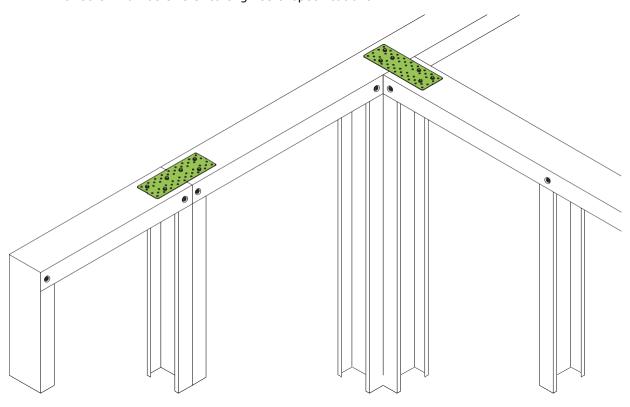
| Product | Item Code | Size | Description | Carton Qty |
|---|---|------------|---|---------------|
| HWH FrameFix DP | Ideal for panel to panel fixing during frame erection and for fixing connectors. | | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 |
| losses and | 002409 | 12g x 25mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 |
| FRAMECAD Flathead | Ideal for connecting metal strapping or bracing and adding additional strength to connectors. | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 |



Fix Plate Design Capacities

| Design Capacity - LRFD Force (kN) | | AS/NZS 4600 / AISI S100 | | |
|-----------------------------------|--------|--------------------------|------------------------|--|
| Item Code Plate Thickness (mm) | | F1 Tension Capacity (kN) | F2 Shear Capacity (kN) | |
| 009801 | 1.15mm | 32.2 | 18 | |

- 1. Not all fastener holes need to be filled, additional fastener holes are provided.
- 2. For screw numbers refer to engineers' specifications.



Ordering and Packaging:

| Item Code | Description | Qty | |
|--------------|----------------------------------|-----|--|
| 009801 | FP-A2 Fix Plate Connector 1.15mm | 50 | |



Apex / Heel Connector Plate AHCP-A2

Application:

Suitable to locally reinforce connection strength of Heel and Apex of any Truss with a pitch of 80 to 320. Patent Protected.



* BMT = Base Material Thickness

Installation:

Use FRAMECAD Certified HEX Head or for applications that require a flush finish use FRAMECAD Flat Head Screws.

For Screw numbers please refer to engineers' specifications.

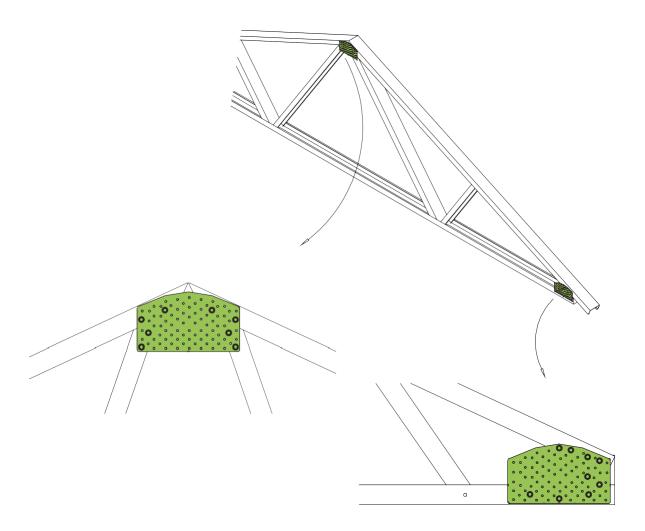
| Product | Item Code | Size | Description | Carton Qty |
|-------------------|---|------------|---|---------------|
| HWH FrameFix DP | Ideal for panel to panel fixing during frame erection and for fixing connectors. | | | |
| | 307387 | 10g x 19mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 |
| | 002409 | 12g x 25mm | Hex Head FrameFix DP, 1000hrs, Loose | 5,000 |
| FRAMECAD Flathead | Ideal for connecting metal strapping or bracing and adding additional strength to connectors. | | | |
| | 001539 | 10g x 16mm | FRAMECAD Flathead DP, 1000hrs, Loose | 10,000 |



Typical Installation

FRAMECAD Connector Plates are specifically designed and engineered to make them easy and efficient to use with the practical geometry of steel trusses and framing.

For Screw numbers please refer to the engineers' specification.



Ordering and Packaging:

| Item Code | Description | Qty |
|--------------|--------------------------|-----|
| 009803 | AHCP-A2 Apex Heel 1.15mm | 50 |



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